

IN THE CLAIMS

Please amend the claims as follows:

Claims 1-11 (Canceled).

Claim 12 (Currently Amended): A stride monitoring device, comprising:

a first and second shoes, the first shoe including at least a magnetic mass;

a the second shoe including at least measurement means to make at least one physical measurement; and electronic means for processing of the physical measurement; wherein the measurement means includes at least one accelerometer and at least one magnetometer for measuring a magnetic field produced by the magnetic mass in the first shoe and for outputting magnetic field signals based on the measured magnetic field produced by the magnetic mass in the first shoe, wherein said magnetic field capable of outputting signals that can be processed to determine stride parameters, and

wherein at least one of said first or second shoes further comprises at least one accelerometer for measuring an acceleration and for outputting acceleration signals based on the measured acceleration.

Claim 13 (Original): A device according to claim 12, wherein each of the first and second shoes includes at least one magnetic mass, measurement means for making at least one physical measurement, and electronic means for processing the physical measurement, the measurement means including at least one accelerometer and at least one magnetometer capable of outputting signals that can be processed to determine the stride parameters.

Claim 14 (Original): A device according to claim 12, wherein the magnetic mass includes at least one permanent magnet.

Claim 15 (Currently Amended): A device according to claim 12, wherein the ~~measurement means~~ second shoe includes a plurality of accelerometers.

Claim 16 (Currently Amended): A device according to claim 12, wherein the ~~measurement means~~ second shoe includes a plurality of magnetometers.

Claim 17 (Currently Amended): A device according to claim 12, wherein the second shoe comprises said at least one accelerometer and electronic means for processing said magnetic field signals and said acceleration signals, wherein said electronic means comprises ~~is provided with~~ means for transmitting a signal output by the electronic means.

Claim 18 (Original): A device according to claim 17, further comprising portable means for receiving the signal transmitted by the transmission means and for displaying data representative of the signal.

Claim 19 (Original): A device according to claim 18, wherein the portable means comprises:

data reception means;

electronic data processing means for processing data, the electronic data processing means including a memory;

control input means; and

display means.

Claim 20 (Currently Amended): A device according to claim 19, wherein the memory includes:

a sequence to calibrate the signal transmitted by the transmission means, as a function of stride length and ~~intrinsic parameters~~ magnetic characteristics of the shoes,
a stride length estimating algorithm,
an algorithm to calibrate the signal transmitted by the transmission means as a function of the parameters input by a user, and
an algorithm to estimate the stride speed.

Claim 21 (Original): A device according to claim 20, wherein the calibration sequence is designed to determine a mathematical calibration law by a polynomial regression, and to determine a direct correspondence between the measured signal and the stride length, for given shoes and a given individual.

Claim 22 (Original): A device according to claim 20, wherein the stride length estimating algorithm uses a measurement of a variation in magnetic field resulting from movement of the magnetic mass.

Claim 23 (New): A device according to claim 12, wherein said second shoe includes said at least one accelerometer and electronic means for processing said magnetic field signals and said acceleration signals.